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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,340	12/05/2000	Yoshio Osakabe	7217/63309	8639

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EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 06/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/730,340

Applicant(s)

OSAKABE ET AL.

Examiner

Devona E. Faulk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claim 1** is rejected under 35 U.S.C. 102(e) as being anticipated by Kondo et al. (U.S. Patent 6,519,656).

Regarding **claim 1**, Kondo discloses a method of data transmission method and apparatus (Figure 1) (100) wherein the scope of the uses the IEEE 1394 standard (column 1, lines 51-65) or serial bus packet (Figure 8) and is within the AV/C fields defined by IEC 61883. The IEEE 1394 standard is a serial bus standard that was published in 1995 and is well known in the art that the IEEE serial bus packet (Figure 8) units, i.e. destination ID, source ID etc., have predetermined lengths. This is inherent in the packet. Figure 1 shows a data transmission system (100) interconnected to other external equipment (column 7, lines 8-32). This reads on "a transmitting method for transmitting data in a predetermined format using a plurality of units each having a predetermined data length among devices linked to a predetermined bus line". He further teaches of the FCP frame having a maximum length of 512 bytes (column 2, lines 6-25), the FCP frame having a AV/C command frame. The FCP frame reads on "auxiliary section". The AV/C command frame having a subunit_type, subunit_ID, opcode and operands fields (Figure 9). The subunit_type field identifies a type of AV equipment and the subsequent opcode

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and operands indicated an actual command such as play, stop, record, etc. (column 2, lines 6-25). This reads on "setting up an auxiliary section for transmitting auxiliary data of transmission data in a unit having the predetermined length data length" and "placing identification data related to spatial placement of the transmission data in a first section within the auxiliary section and placing data related to a set-up of the transmission data in a second section within the auxiliary section".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 2-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (U.S. Patent 6,519,656) in view of Oguro (U.S. Patent 6,097,558).

Claim 2 claims the transmitting method of claim 1 wherein the transmission data in the first section is data related to positioning of a speaker for each of a plurality of channels. As stated above apropos of claim 1, Kondo meets all elements of that claim. Therefore, Kondo meets all elements of claim 2 with the exception of the claimed matter. Regarding claim 2, Oguro teaches of digital audio signal transmission for transmitting data from a plurality of channels (See Abstract) having data frames that indicate different speaker positions and channel data (Figures 25A-25D; Figures 30a-30F; column 15, lines 50-column 16, line65). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use

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Oguro's concept of having a dataset of data frame indicate the speaker positioning as claimed for the benefit of having a transmission method capable of providing speaker setup data without increasing the production/processing load of a transmission device.

Claim 3 claims the transmission method of claim 1 wherein the transmission data is audio data, and the data related to the set-up in the second section is data related to a sampling frequency of each of a plurality of prepared channels. As stated above apropos of claim 1, Kondo meets all elements of that claim. Therefore, Kondo meets all elements of claim 2 with the exception of the claimed matter. Regarding claim 3, Oguro teaches of sampling frequencies corresponding to a plurality of prepared channels (column 18, lines 14-48). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Oguro's concept of having data correspond to a sampling frequency as claimed for the benefit of decreasing the storage area needed for audio data.

Claim 4 claims the transmitting method of claim 1 wherein the data is audio data and the identification data in the first section is identification data related to spatial placement of a recording channel and the data related to the set-up in the second section is data indicates one of existence and absence of the recording channel for each of a plurality of channels. As stated above apropos of claim 1, Kondo meets all elements of that claim. Therefore, Kondo meets all elements of claim 2 with the exception of the claimed matter. Regarding claim 4, Oguro teaches of digital audio signal transmission for transmitting data from a plurality of channels (See Abstract) having data frames that indicate different speaker positions and channel data (Figures 25A-25D; Figures 30a-30F; column 15, lines 50-column 16, line 65). The channel data indicates which channel is active and which is not. Thus, it would have been obvious to one of ordinary

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skill in the art at the time of the invention to use Oguro's concept of having a dataset of data frame indicate the speaker positioning as claimed for the benefit of having a transmission method capable of providing speaker setup data without increasing the production/processing load of a transmission device.

Claim 5 claims the transmitting method of claim 1 wherein the transmission data is image data, the identification data in the first section is data related to a placement to display the image data and the data related to the set-up in the second section is data that specifies a display pattern of the image data. As stated above apropos of claim 1, Kondo meets all elements of that claim. Therefore, Kondo meets all elements of claim 2 with the exception of the claimed matter. Regarding claim 5, Oguro teaches of a video auxiliary data (VAUX) section and the capability of processing image data (column 6, line 44; column 9, lines 17-column 10; column 11, lines 34-column 13). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to applying Oguro's concept of having data frames indicate placement of data to image data for the benefit of having a transmission device capable of producing an improved image quality output.

5. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Osakada et al. (EP 0 762 684 A2) in view of Kondo et al. (U.S. Patent 6,519,656).

Regarding **claim 6**, Osakada discloses a data transmission method for digital audio signals using the IEEE 1394 isochronous transmission format/serial bus standard (See Abstract, page 7, lines 5-7). The isochronous mode means a mode of transmitting data synchronized with an isochronous cycle of 8kHz. Osakada discloses converters (6 and 7) that convert the protocol of the control bus and the protocol of IEEE-1394 to each other, which reads on "data input

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means for obtaining predetermined transmission data". He further teaches that it is in the converters that convert the data to IEEE 1394 isopacket format and this entails dividing the transmission data (page 8, line 14-page 10), which reads on "transmission data generating means for dividing the transmission data obtained by the data input means into a plurality of items of data each having a predetermined data length". Osakda further teaches of a CIP header section of the data block packet (Figures 4-5) including a FMT (format ID field) , which indicates a transmission format (Figure 6) or what type of data is being transmitted. This reads on "and for generating transmission data of a specific format by placing label data specifying a scheme of each of the plurality of items of data in a head portion of each of the plurality of items of data" . Osakda further teaches of a data block pack including a FCP frame (Figure 16). Although Osakda teaches on the above named elements he fails to teach of generating auxiliary data having the data and setting up a section as claimed. However these concepts were well known in the art at the time of filing as taught by Kondo. Kondo teaches of the FCP frame having a maximum length of 512 bytes (column 2, lines 6-25) , the FCP frame having a AV/C command frame. The FCP frame reads on "auxiliary section". The AV/C command frame having a subunit_type, subunit_ID , opcode and operands fields (Figure 9). The subunit_type field identifies a type of AV equipment and the subsequent opcode and operands indicated an actual command such as play, stop, record, etc. (column 2, lines 6-25). Modifying Osakada's data packet by using Kondo's FCP frame reads on "wherein the transmission data generating means also generates auxiliary data having the data length, and sets up a section used in transmitting the auxiliary data", " the transmission data generating means places identification data related to a spatial placement of the transmission data in a first section within the auxiliary data and places

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data related to a set-up of the transmission data in a second section within the auxiliary data”.

Osakada's Figure 1 indicates that the converters (6 and 7) and/or the DVCR (5) are capable of sending transmission data to the IEEE 1394 serial bus. This reads on "sending means for sending generated by the transmission data generated by the transmission data generating means to a predetermined bus line". Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Osakada's data packet by using Kondo's FCP frame for the benefit of having a device capable of controlling AV equipment.

6. **Claims 7-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Osakada et al. (EP 0 762 684 A2) in view of Kondo et al. (U.S. Patent 6,519,656) in further view of Oguro (U.S. Patent 6,097,558).

Claim 7 claims the transmitting apparatus of claim 6 wherein the transmission data obtained by the data input means is multi-channel audio data and the identification data in the first section within the auxiliary data generated by the transmission data generating means is data related to positioning of a speaker for each of a plurality of channels. As stated above apropos of claim 6, the combination of Osakada and Kondo and meets all elements of that claim. Therefore, the combination meets all elements of claim 7 with the exception of the claimed matter. Regarding claim 7, Oguro teaches of digital audio signal transmission for transmitting data from a plurality of channels (See Abstract) having data frames that indicate different speaker positions and channel data (Figures 25A-25D; Figures 30a-30F; column 15, lines 50-column 16, line 65). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Oguro's concept of having a dataset of data frame indicate the speaker positioning as claimed for the benefit of having a transmission device capable of

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providing speaker setup data without increasing the production/processing load of the transmission device.

Claim 8 claims the transmission apparatus of claim 6 wherein the transmission data obtained by the data input means is multi-channel data audio data and the data related to the set-up in the second section within the auxiliary data generated by the transmission data generating means is data related to a sampling frequency of each of a plurality of prepared channels. As stated above apropos of claim 6, the combination of Osaka and Kondo meets all elements of that claim. Therefore, the combination meets all elements of claim 8 with the exception of the claimed matter. Regarding claim 8, Oguro teaches of sampling frequencies corresponding to a plurality of prepared channels (column 18, lines 14-48). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Oguro's concept of having data correspond to a sampling frequency as claimed for the benefit of decreasing the storage area needed for audio data.

Claim 9 claims the transmitting method of claim 6 wherein the transmission data obtained by the data input means is multi-channel data audio data and the identification data in the first section within the auxiliary data generated by the transmission data generating means is identification data related to spatial placement of a recording channel and the data related to the set-up in the second section is data that indicates one of existence and absence of the recording channel for each of a plurality of channels. As stated above apropos of claim 6, the combination of Osaka and Kondo meets all elements of that claim. Therefore, the combination meets all elements of claim 9 with the exception of the claimed matter. Regarding claim 9, Oguro teaches of digital audio signal transmission for transmitting data from a plurality of channels (See

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Abstract) having data frames that indicate different speaker positions and channel data (Figures 25A-25D; Figures 30a-30F; column 15, lines 50-column 16, line 65). The channel data indicates which channel is active and which is not. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Oguro's concept of having a dataset of data frame indicate the speaker positioning as claimed for the benefit of having a transmission method capable of providing speaker setup data without increasing the production/processing load of a transmission device.

Claim 10 claims the transmitting apparatus of claim 6 wherein the transmission data obtained by the data input means is image data and the identification data in the first section within the auxiliary data generated by the transmission data generating means is data related to a placement position to display the image data and the data related to the set-up in the second section is data that specifies a display pattern of the image data. As stated above apropos of claim 6, the combination of Osakada and Kondo meets all elements of that claim. Therefore, the combination meets all elements of claim 10 with the exception of the claimed matter. Regarding claim 10, Oguro teaches of a video auxiliary data (VAUX) section and the capability of processing image data (column 6, line 44; column 9, lines 17-column 10; column 11, lines 34 – column 13). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to applying Oguro's concept of having data frames indicate placement of data to image data for the benefit of having a transmission device capable of producing an improved image quality output.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER